





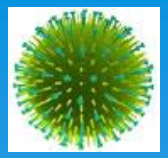

Infectious Disease Epidemiology Program, Maine Center for Disease Control and Prevention

Ebola Virus Disease

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April 21, 2015

infectious disease epi
maine.gov/idepi
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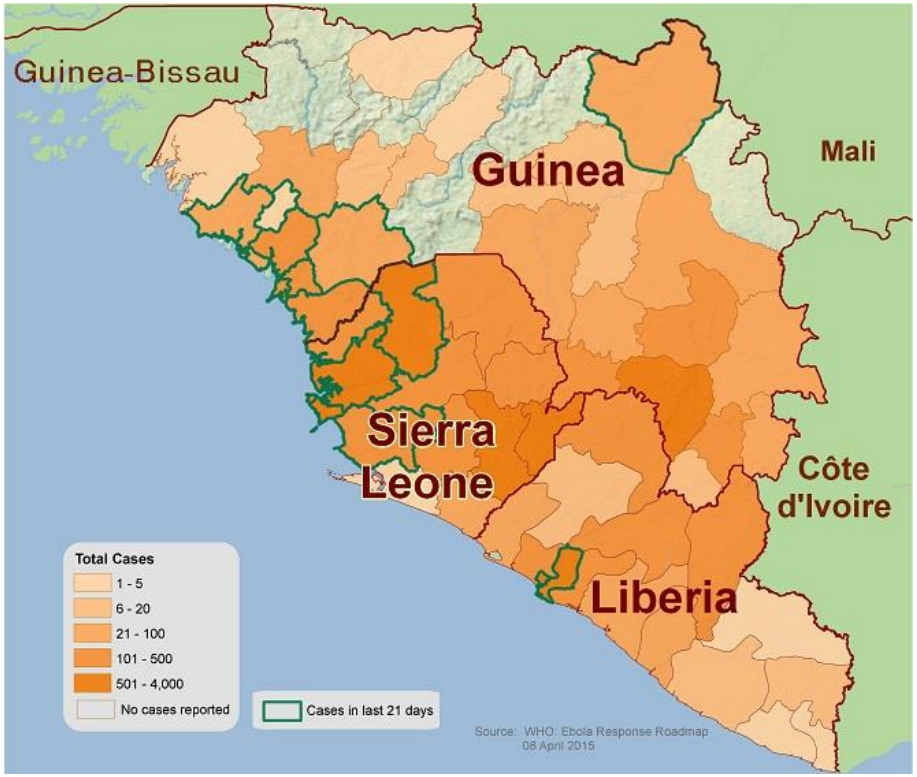
Maine Center for Disease Control and Prevention
An Office of the Department of Health and Human Services
Paul R. LePage, Governor
Mary C. Mayhew, Commissioner

Background and Transmission

- Ebola Virus Disease (or Ebola hemorrhagic fever) is caused by infection with a virus that was first discovered in 1976 in what is now the Democratic Republic of the Congo. Since then, outbreaks have appeared sporadically.
  - The natural reservoir host of Ebola virus remains unknown. Bats or primates are the most likely reservoirs.
- No transmission before symptom onset.
- The virus can be spread only through direct contact.
- Symptoms may appear anywhere from 2 to 21 days after exposure to Ebola, but the average is 8 to 10 days.

Ebola Epidemic



Outbreak Update as of **4/8/2015***

Total

- Suspected & confirmed cases –25,591
- Deaths – 10,602
- Laboratory confirmed cases – 14,839

- Ebola has been **diagnosed** in the United States in four people
  - Index patient: traveled to Dallas, TX from Liberia
    - Patient died October 8th 2014 (first and only US death, thus far)
  - Two healthcare workers: cared for the index patient
    - A) recovered & released from NIH Clinical Center October 24
    - B) recovered & released from Emory Hospital October 28
  - One medical aid worker: traveled to New York City from Guinea
    - Recovered and released from Bellevue Hospital November 11

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***Updated case counts available at:**
http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/case-counts.html

Traveler Notification and Monitoring

All travelers to the US from Ebola-affected countries receive enhanced entry screening and post-arrival active monitoring for Ebola signs or symptoms until 21 days after their departure from an Ebola-affected country

- **Federal CDC**
  - Screens for travelers returning from Sierra Leone, Guinea, and Liberia
  - Assesses risk and provides Check and Report (CARE) kit to traveler which includes a thermometer, important state and federal contact information, and informational materials
  - Notifies Maine CDC via Division of Global Migration and Quarantine Epidemic Information Exchange (DGMQ Epi-X) notifications

- **Maine CDC**
  - Makes contact with traveler
  - Determines risk classification and explains monitoring process to the traveler
  - Performs daily direct active monitoring or active monitoring as appropriate for the remainder of the 21 days of their monitoring period
  - Assists medical providers in determining need for Ebola testing of any travelers that become symptomatic and would perform an investigation on any suspect cases.

Active Monitoring vs Direct Active Monitoring

- **Active Monitoring**
  - For most low risk travelers and contacts
  - Daily phone calls to travelers to review symptom status and monitor temperature
  - No movement or travel restrictions

- **Direct Active Monitoring (DAM)**
  - Almost exclusively applicable to just the some risk and high risk categories of travelers and contacts
  - Maine CDC directly observes the individual at least once daily to review symptom status and monitor temperature (Skype is an option when in-person visits are not possible)
  - Some restrictions on public transportation and attending group events

The monitoring period ends 21 days after the last potential exposure. At that time, the traveler is at no risk of developing Ebola.

Monitoring Overview: Maine and the US

- **Maine**
  - Travelers in Maine since October 2014
    - 6 (3 have been monitored multiple times due to multiple trips to affected countries)
      - 5 low risk, 1 some risk (DAM)
  - Collaboration with other states for interstate notifications, travel permissions, and sharing of monitoring duties
    - Coordinated with other states to monitor 7 travelers/HCWs who came to Maine during their 21 day monitoring
  - Working on utilizing technology (tablets and Skype) to conduct direct active monitoring when in-person visits not possible.
- **United States**
  - Thousands of travelers monitored in the US since monitoring began in 2014.

Ebola Summary

- The 2014-2015 Ebola outbreak in West Africa is the largest in history and has affected multiple countries.
- Globalization and non-specific symptoms of the disease have been additional challenges.
- Continued response and vigilance is needed by all agencies.
- Traveler and contact monitoring by public health authorities is essential in making sure that Ebola is not spread.
- Maine CDC has systems and protocols in place for traveler monitoring, case investigation, and assessment/rule-outs.
- www.maine.gov/ebola

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